

Carrier Aviation: 40 Years Old and Growing

By William J. Moyer

ON NOVEMBER 14, 1910, Eugene Ely, pilot for an airplane manufacturer, took off on a flight that in less than four decades changed the entire concept of naval combat operations.

Ely flew his wood-canvas-and-bamboo flying machine from an improvised flight deck on the cruiser Birmingham at Hampton Roads.

It was a perilous as well as a historic flight. The plane sped with all its power down the platform, then dipped so low that its wheels touched the water. It struggled into the air, however, and when it landed a few minutes later at nearby Willoughby Spit, a new era in naval operations had been started. Military men the world over were enthusiastic.

It was the start of aircraft carrier operations.

Two months later, Ely flew from San Francisco to the armored cruiser Pennsylvania, which was anchored in the bay and a short time later took off from the deck and flew back to the city. Ely, however, took a cue from his first trip off the Birmingham and wore a life preserver improvised from the inner tube of a bicycle tire.

The second flight was memorable even though primitive. A 119-foot landing platform had been built on the Pennsylvania and ropes with a 50-pound sandbag attached to each end were placed crosswise of it at about 6-foot intervals to brake the plane as it landed. By means of 2-by-4s placed lengthwise of the platform, the ropes were held 4 inches off the floor and, when the plane came roaring in at 40 miles an hour, it was halted within 30 feet and, in Ely's words, "with no perceptible jar."



Above: Martin Mauler, rocket-carrying plane used on carriers. Right: In contrast, Mr. Ely at the controls of the flimsy plane he flew from the Birmingham. Navy Photos.



Thus, naval aviation started, although it was several months later—May 8, 1911—that the Navy ordered its first plane. Sticklers for details will argue that naval aviation actually began in the Civil War, but it requires a pretty strenuous tug on the imagination to visualize the captive balloons that floated above some Union boats as the actual inception of naval air operations.

Ely's two flights set off an era of intensive training and experimentation. The airplane was considered as a new set of eyes and ears for the Navy and Capt. Washington Irving Chambers, the first director of naval aviation,

said that the flights had proved an airplane could leave from and land on a ship, that observations could be made, photographs taken, messages received and sent by wireless and passengers carried.

In 1921, the Navy established its Bureau of Aeronautics and, in 1922, the Langley was converted from a coal boat into an aircraft carrier. It served as a training and experimental ship until 1936 and, in World War II, after having been converted into an aircraft tender, went down with colors flying off Java on February 27, 1942.

But the Langley had served its purpose. The primary

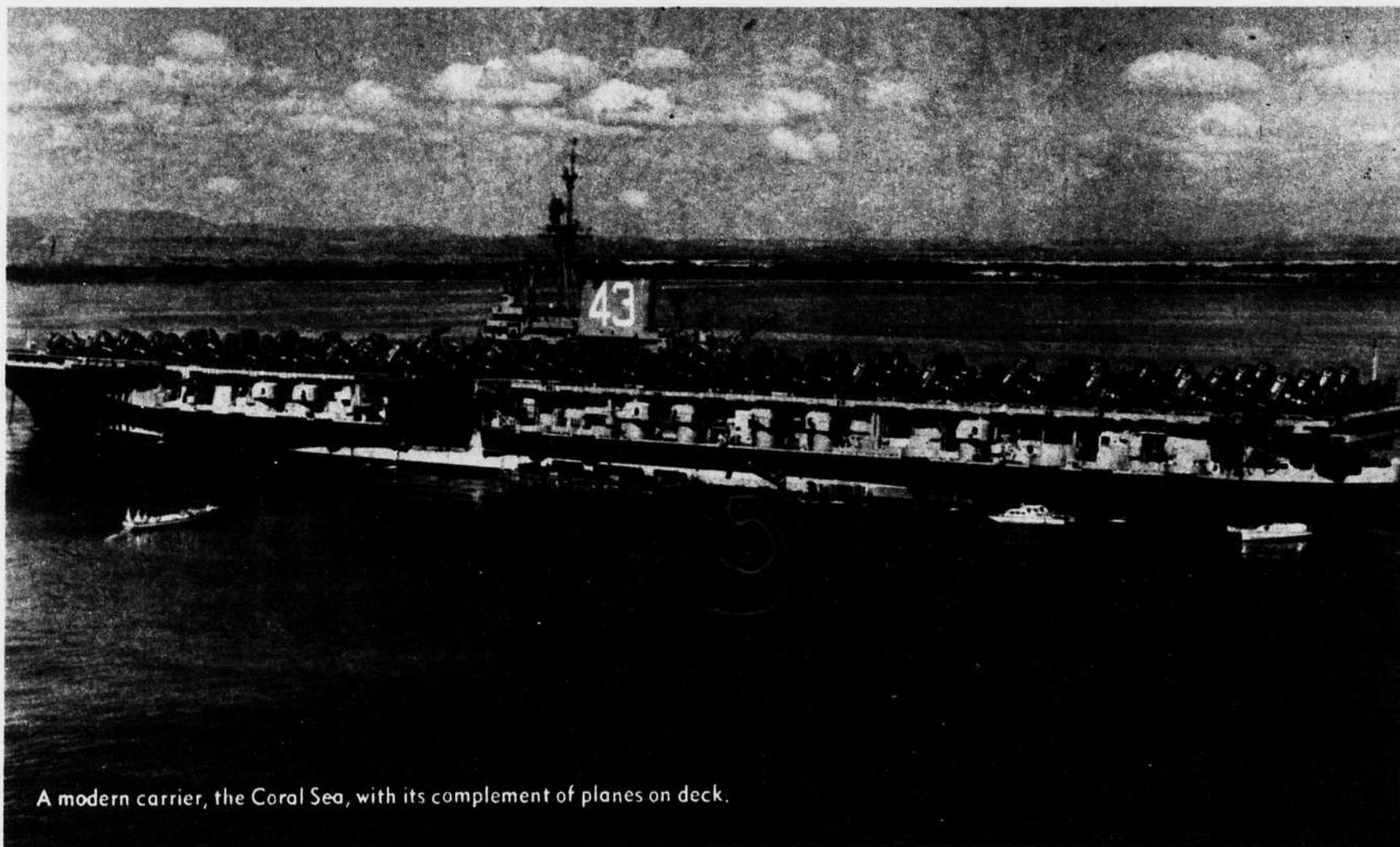
lessons for aircraft carriers were learned from her and in 1927 two new carriers, the Saratoga and Lexington, were commissioned. Both had been started as cruisers during World War I, but were un-

finished when the war ended. Nine years later their hulls were used as the substructures for modern carriers. They were basically the same as present carriers, were the fastest in the fleet and in addition to carrying 75 planes, personnel and repair shops, mounted 8-inch guns.

The Saratoga survived World War II. She finally went to the bottom in the Bikini atom bomb test in 1946. The Lexington was sunk by the Japanese in the Battle of Coral Sea in May, 1942. But they were the blueprints for a powerful fleet of carriers that ripped into the enemy around the world.

At the outset of our entry into World War II, the Navy had seven big carriers. They still were considered the Navy's eyes and ears and their principal duty was to protect the fleet.

When the war ended, the Navy had 20 big carriers, 8 lighter ones and 71 still smaller and slower ones roaming the seas. No longer were they the eyes and ears of the fleet. By now they were recognized as the Navy's most powerful striking force and the duty of the fleet now was to protect them. It was a new concept of combat operations that began with Ely's flight. The Navy will mark the anniversary Tuesday.



A modern carrier, the Coral Sea, with its complement of planes on deck.